



ACUVET ELISA pig - MAP

ACUTE PHASE PROTEINS

Rev. 05/19

Acute phase proteins (APP) are plasma proteins that increase in concentration in response to inflammation caused by injuries or lesions, infection or stress. APP are valuable biomarkers in the assessment of animal health and welfare. In pig production APP measurements can be used in the detection of subclinical disease or stress-causing factors that compromise animal welfare and reduce productive performance. Pig-MAP, also known as ITIH4, is one of the main APP in pigs, and an excellent marker of inflammation and distress in this species. As biomarker Pig-MAP has the advantage of a low inter-animal variability in the normal state compared to other APP such as haptoglobin. Pig-MAP serum concentration in healthy animals is lower than 1 mg/mL and can increase up to a maximum of 10-15 mg/mL in acute conditions.

Enzymatic immunoassay for the measurement of pig-MAP/ITIH4 in serum or plasma

Validated method- Species-Specific-Traceable to International Standard

Type of method	Sandwich ELISA. 2 Monoclonal antibodies. Pig-specific.
Format	96 wells microtiter plates with 8 wells separable strips. Two formats: 96 and 192 test
Reading	Abs 450 nm
Standard	Liquid. Standardised to the Reference Serum for Pig Acute Phase Proteins (EU concerted Action QLK5-CT-1999-0153)
Assay time	90 min
Matrix	Serum, plasma,*

* Other matrix: request information

Parameter	Result
Measurement range	0.3-3 µg/mL
Limit of detection	0.2 µg/mL
Intra-assay CV	< 10%
Inter-assay CV	< 10%
Linearity	R ² > 0.99
Recovery	94-107%
Methods comparison: Radial immunodiffusion	R > 0.98 Analytical equivalence



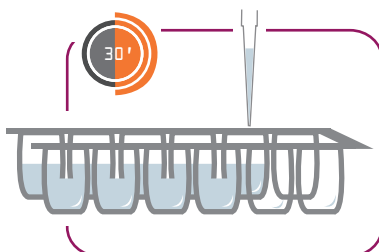
Validation report available on request.



Validation:
Vet. Immunol. Immunopathol 127, 228-34. (2009)

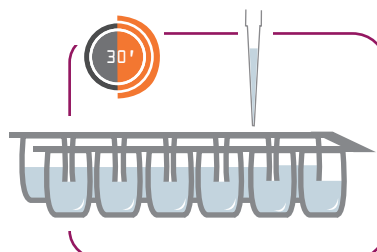
Assay procedure

Sample incubation



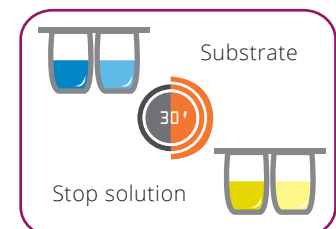
- 1-Dilute sample
- 2-Add sample
- 3-Incubate (30min)
- 4-Wash

Conjugate incubation



- 5-Add conjugate
- 6-Incubate (30 min)
- 7-Wash

Results



- 8-Add substrate
- 9-Incubate (30min)
- 10-Stop reaction
- 11-Read
- 12-Obtain value